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ANNUAL REPORT

OF THE

Game and Fish Commission

OF

ILLINOIS



For the Fiscal Year 1914-15

[Printed by authority of the State of Illinois.]



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SCHNEPP & BARNES, STATE PRINTERS SPRINGFIELD, ILL. 1916.

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LETTER OF TRANSMITTAL.

To His Excellency, Edward F. Dunne, Governor of the State of Illinois.

The Game and Fish Commission has the honor to present herewith its report covering the operations of the department for the fiscal year 1914-1915.

C. J. DITTMAR, *President*. HENRY V. MEETEREN. J. I. BLACKMAN.

Commission.

To His Excellency, Edward F. Dunne, Governor of Illinois.

Since our report made to you last year the energies of this department have been directed toward giving substantial effect to the policy laid down by you in your letter to the department shortly after its creation. The essence of that communication was that the department should be so conducted as to give to the people of the State a distinct service.

The reports of the various bureaus of the department, together with the financial and other statistical statements herewith submitted, will give a good indication of the degree of success had

by this department in carrying out your policy.

It has always been the aim of this department to carry on the work of conserving and propagating game and fish at a cost not to exceed the revenue of the department. Our receipts for licenses and fines as shown elsewhere amount to a little short of our expenditure. This does not quite express the work of the department because it does not take account of some money spent in permanent improvements which are now a State asset. Or in other words, instead of paying out all the money the department has received, a good portion has been put into permanent improvements.

In the matter of game protection you are advised that the State has been well patroled during the past year, and that violations of the game law have not been many. Mere protection, however, has not been a great concern of the department. Rather, your commissioners have been more concerned in an effort to increase the game supply of the State. This is a difficult problem, because year after year the land values of the State increase until at the present time there is very little rough land in the State where game can thrive. The cutting away of the thickets and the draining of land has deprived the game of a home. For that reason game has been growing less in the State year after year. This means a reduction in the number of licenses needed, without a reduction in

cost of protection.

To compensate, so far it has been possible to do so, for the reduction of natural propagating grounds, we have adopted the plan of establishing game reservation and bird sanctuaries in various parts of the State, where game may be propagated in a semiartificial way at a comparatively small cost. At the last session of the Legislature the commission was empowered to establish the equivalent of one game reservation to each county of the State. This means that certain counties where game has little or no chance to thrive may be omitted in our allotment of reservations. These reservations will help greatly in restocking the State with game. But no matter what may be done to increase the supply of game, and no matter how stringent the protective laws may be made, we are never to have the shooting in this State that the

sportsmen of a few years ago enjoyed. Our game birds are sure to be scarcer with each succeeding year. There are still many waterfowl to be found in parts of our State but, like other game birds, they are disappearing from year to year as the continually rising land values compels more and more intensive farming.

With regard to the fisheries of the State it may be said that our rivers and lakes afford a large and profitable field for the activities of this department. Although great progress has been made in the past two years in developing our fisheries, the fact remains that this important work has only just begun. When we consider how much there is yet to do to give Illinois its proper rank among fish breeding states, what has been done is comparatively little. The Spring Grove hatchery has been steadily developed, and further improvements will be made during the fall, so that next year this plant will rank with the best in the country for economy of maintenance and productiveness. This plant will hatch a sufficient number of game fish for the northern waters of the State. But a new plant is needed to take care of the waters in the middle and southern part of the State, to say nothing of great Lake Michigan.

For a number of years many large and small manufacturers throughout the State have made use of our lakes and streams to carry off their sewage. This pollution of our good fish waters has been going on for so long a time, that some of the offenders had come to believe they had a right to use our fish waters in violation of the law.

The Rivers and Lakes Commission has been enthusiastic in its cooperation with this department in its effort to remedy this evil. A long list of cases complained of by this department has been promptly acted upon by the Rivers and Lakes Commission with the result that we are in a fair way to do away with stream and lake pollution entirely. Another matter in which the Rivers and Lakes Commission has rendered this department substantial aid is in the matter of encroachments by private interests upon the public waters of the State. By continuing our cooperative work in this matter, we will be able to educate the people who have been violating the law and compel, for the future, the law's observance.

Since our last report we abolished the game farm. We did this because we did not think the product of the farm was worth its cost to the State. The semidomestic birds raised on the farm were used for stocking the lands of the State best suited to these birds. In some sections they did fairly well but for the most part there has been little gain throughout the State. Not enough to warrant further expenditure in maintaining a farm for the propagation of this class of game birds. We feel we can do more with the money it cost to maintain the farm, in establishing game reservations upon which we can propagate our native birds.

Under the authority vested in this commission by law the following waters have been set aside as fish preserves:

STATE FISH PRESERVES.

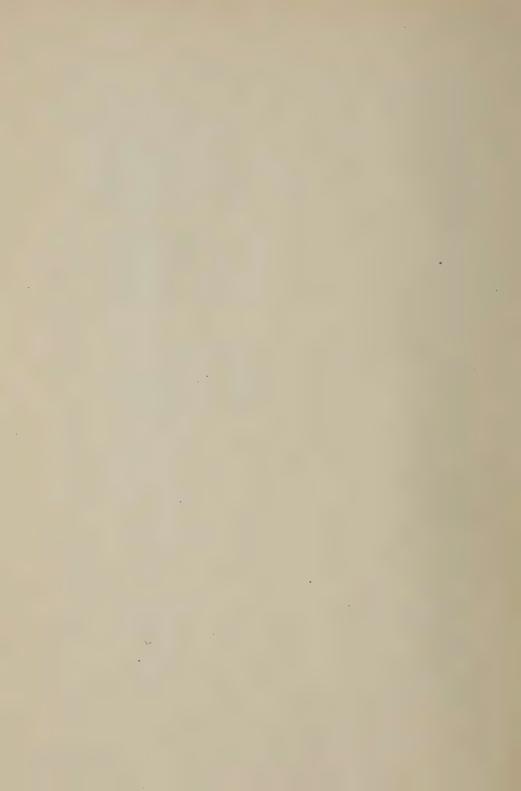
Rock River and tributaries, Quincy Bay, Kankakee River, Des-Plaines River, Mazon River, Calumet Lake, Spring Lake, Bogue Lake, Tomlinson Run, Sand Slough, Salt Creek, Sugar Creek, Kickapoo Creek with tributaries, Beaver Pond in Lawrence County, Vermilion River in Livingston County, Vermilion River and Little Vermilion River, North, Middle and Salt Forks in Vermilion County, Kaskaskia River and tributaries, Embarrass River and tributaries in Cumberland, Coles, Douglas and Champaign Counties, Sangamon River and tributaries in Sangamon, Macon, Piatt and Champaign Counties, Mackinaw River and tributaries in Tazewell and Woodford Counties, Fox River and tributaries.

In the past, the Federal Bureau of Fisheries made a practice of taking our young fish from the overflowed lands along our large rivers, and distributing them largely in other states. The commission met representatives of the Federal Bureau of Fisheries last spring and made a definite agreement whereby a certain proportion of such fish, taken from land-locked waters were to be planted in the waters of the State of Illinois.

Respectfully submitted,

GAME AND FISH COMMISSION.

C. J. Dittmar, President. Henry V. Meeteren, Commissioner. J. I. Blackman, Commissioner.



REPORT OF STATE FISH CULTURIST.

To the Game and Fish Commission:

The important activities of the State Fisheries Bureau are best reckoned by the season, which for the year, will close about April 1. During the period contemplated in a season's work pike perch and trout spawn are taken and hatched, fry distributed from the hatchery, fry and fingerlings taken from the bass pond and distributed. As the fiscal year of the department is closed July 1, a satisfactory report of the current season's work cannot be made at this time. The report will show the operations of the bureau during the fiscal year. But as this will not fairly present the progress made this season, it may be well to anticipate the results of the latter part of the season's work in this report.

Last year the annual report of the commission showed that a little more than ten acres of land had been purchased at Spring Grove, in McHenry County, and that a spring-fed lake, and land surrounding the lake had been leased. This lake was stocked in the spring of 1914 with black bass. From this stock during last season, about 300,000 fingerlings were taken from the lake and distributed.

300,000 fingerlings were taken from the lake and distributed.

Last year the bass lake could not be put in proper shape to secure the best results, as it did not come into the possession of the department in time to make such improvements as were necessary to make of it a successful artificial pond. When the season for taking out fry was at an end a suitable bulkhead was put in, and other improvements made, that would give complete control of the pond. Now it is possible to lower the pond readily without the risk of losing any fish.

During the spring of 1914, there were 500 black bass caught and put into the bass pond. In the fall an additional 300 black bass were put in the pond, thus giving for this season's hatching 800 adult bass. These fish are large, averaging about 5 pounds each.

From this parent stock 645,000 advanced fry were produced and distributed before July 1. During the month of July 110,000 addi-

tional fry were taken from the pond and distributed.

Up to July 1, there were taken from the pond and distributed 6,500 yearlings. Later there were more than 10,000 yearlings distributed.

During the months of August and September the work of taking yearlings and fingerlings of this year's hatch will be continued. How many young fish are still left in the pond it would be impossible to say. It is expected, however, that the season's output from the Spring Grove bass ponds will approximate 1,000,000 fry, No. 1 and No. 2 fingerlings and yearlings. This will in all probability be a record



output of the country for the season. This result is particularly gratifying in view of the fact that we had a poor bass hatching season this year. During the latter part of April and early part of May the weather was unusually warm. The bass began to spawn during this warm period. Later there was a season of cold weather which caused the early laid bass eggs to fungus. As the Spring Grove bass pond is fed only by springs, there was not such a rise of roily water as there was in other lakes. Most of the early laid eggs, therefore, in this pond hatched, whereas in most waters a great majority of the early laid eggs were lost.

Reckoned from July 1 of last year to July 1 of this year (which is the department's fiscal year) the bureau records show that the output of black bass fry, fingerlings and yearlings is as follows: 361,000 fingerlings; 645,000 advanced fry; 6,500 yearlings. On hand in hold-

ing trough July 1, 10,000 yearlings.

The 361,000 fingerlings were actually caught and distributed during the current fiscal year. But last year there were no fry taken from the pond, the hatch being allowed to remain in the pond until the fingerling stage. Thus a part of last season's hatch comes in the

current fiscal year.

During the summer of 1914, plans were prepared for a hatchery building and an artificial pond of two and one-half acres, to be used as a reservoir for supplying the hatchery and a pike perch holding pond. The water for this pond was secured from a spring on the high ground near the pond, giving a fall of about 9 feet from the water level of the pond to the floor of the hatchery. The fall actually needed is about 6 feet for a two-tier hatching battery, thus giving a good head with an allowance for low water in the reservoir.

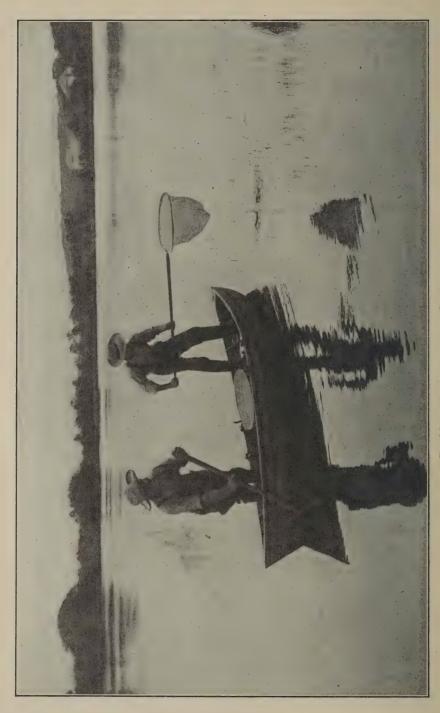
The work on the pond and hatchery was begun in the fall. The hatchery was completed in time for the spring hatching of about 18,000,000 pike perch, and the pond, while not completed, was far enought advanced to be made use of in supplying water for the hatchery.

The water used for hatching is pure spring water. This, if well managed, is much better than ordinary lake water, as the temperature may be kept under better control, and the water is free from silt. Last spring we had a flow into the hatchery of about 75 gallons a minute. This was ample for the number of jars used. But as the size of the battery will be increased we shall need more water. We now have two splendid springs that discharge into the pike perch pond and reservoir 60 gallons a minute each. This gives us 120 gallons of water a minute for the pond and hatchery.

Our plan is to have both springs empty into the pike perch pond, within a few feet of each other. At this point will be built a reservoir about 10 feet square. From this small pond the water will be piped to the bulkhead and from there to the hatchery.

It has been thought best to do this instead of taking the water directly from the pike perch pond, for the reason that the water will always be clear and of a more uniform temperature than the water in the larger pond.

One of the difficulties in the way of hatching pike perch successfully is the variation in temperature of the water. Water taken from



large ponds or lakes is likely to vary many degrees. When the water gets beyond 60 degrees the fry are hatched quickly with the result that they are weak. At a uniform temperature of 60 degrees pike perch eggs will hatch in about ten or twelve days. A few will hatch in seven days, but the bulk of the hatch will be out in ten days. Fry hatched in so short a time are not as strong as fry that come out in from twelve to fourteen days. If the water can be so managed that it may be kept at a mean temperature below 60 degrees, a strong lot of fry may be hatched.

We hope by means of the water arrangement planned to be able to maintain an adequate flow of clear water of a comparatively even temperature, thus insuring a successful hatch.

Practically all the work done at the Spring Grove hatchery last year was of a nature calculated to produce results. Little was done in the way of beautifying the place. That part of the work has been taken up this year, and will be continued along with other work during the summer and fall. Grading has been done around the hatchery and arrangements made for the planting of shrubs and trees this fall and next spring. Some work is necessary on the roadway to the hatchery, but that will be deferred until next year.

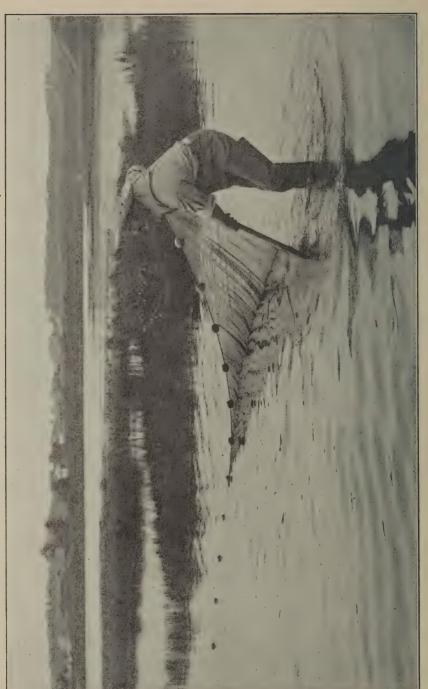
During the fall and winter there will be some work done on the interior of the hatchery. In the early fall we will build a brook and rainbow trout hatching box to be set into our No. 2 trough. There is a pipe and faucet attached to this trough that will give us an ample flow of clear cold spring water suitable for hatching trout. As we have no trout large enough to yield spawn this year, we will have to rely upon the Federal Government for a supply of eggs. The application for this spawn has already been made through Senator J. Hamilton Lewis, and I am assured by the Federal Bureau of Fisheries that the request for eggs will be granted.

Our pike perch battery was built for 150 jars. We did not use the full number last year, as with a new plant and an untried water supply it was not deemed advisable to use more than 100 jars. During the winter the battery will be prepared for 150 jars. Meanwhile our water supply will be increased so that we will have more than enough

for our pike perch hatching.

Four cement trout ponds have been built on the southeast section of the Spring Grove property. Two acres of land at this point have been bargained for. The trout ponds are 30 feet long by 8 feet wide each, and have a fall from one to the other of a little more than two feet. At present there is a flow of good spring water of about 40 gallons a minute. For the fish now in these ponds this is sufficient, but with an increase in fish we will need more water. This we can get by piping the water from a nearby spring on the hillside.

We secured from the Federal Government, through the good offices of Senator Lewis, 500 fingerling brook trout. A little later we were able to trade with the Federal Bureau of Fisheries 8,000 yearling black bass, for an equal number of brook and rainbow trout. These fish were brought to Spring Grove by the Government fish car. We therefore have in our trout ponds more than 8,000 trout which have cost us no outlay of money.



Seining for Yearling Black Bass-Spring Grove.

Trout culture in Illinois should be made incidental to the work of breeding the more obvious Illinois fish, because there is very little brook or rainbow trout water in the State. At Spring Grove the work of hatching trout can be done very economically in connection with the pike perch and bass work. The water used in our trout ponds flows into our bass ponds, and is also used at the hatchery. The hatching of trout is done in the late fall and winter when the men at the hatchery are not particularly busy. The same hatchery and water reservoir that is used for the hatching of pike perch may be used for the trout work. So that, as a matter of fact, there is much overhead expense that may be well used in the trout work. Or, in other words, we will be able to hatch at Spring Grove all the trout the State will need, at a very small cost.

Among the things contemplated in next year's work, is another series of four trout ponds, to take care of the increase to be expected within the next two years. These ponds may be built across the west end of the pike perch pond at a very small expense. We already have two springs emptying into this end of the pond. These springs will flow about 120 gallons a minute. This will take good care of four ponds of good size, and from the trout ponds, flow into the pike perch pond. The lower pond may be used as a reservoir for the pike perch hatchery. With two series of trout ponds, one may be used for brook trout, the other for rainbow trout.

Arrangements have been made to build a pond about two acres in area on the north side of the pike perch pond, to be used as a rearing pond for black bass. This pond can be built cheaply as the north dike of the pike perch pond will serve as a dike for the south side of the rearing pond. On the west is high ground, which with a very little work may be made into a dike for that end. As this will be a shallow pond, the cost of excavation and dike building will be small.

The ground selected for this rearing pond is peculiarly suited to the purpose as a large part of the pond may be kept shallow, and will grow such aquatic plants as are needed to furnish food for young bass. When this pond is completed a suitable number of fry may be taken from the breeding pond, for stocking. The following spring these may be distributed as yearlings. Moreover, with a stock of fingerlings and yearlings on hand, distributions may be made at seasons when there is no fry to distribute. Besides, fingerlings and yearlings are better able to take care of themselves when planted, than fry.

There is such a growing demand for young fish, particularly black bass, that additional ponds will be needed if we are to meet this demand. The Spring Grove bass ponds, and pike perch hatchery will take good care of the waters north of Chicago. But for the middle and southern section of the State a new hatching plant is needed.

Something should be done to make of Lake Michigan a productive body of fish water. Lake trout and white perch thrive in this water. With a suitable hatchery to supply fry of these varieties, the output would have an important commercial value. At such a hatch-



Yearling Black Bass-Spring Grove Hatchery.

ery, pike perch might be hatched to take care of the pike perch water

south of Chicago.

It has been suggested that a hatchery and aquarium be built near the lake in one of our city parks. This would be a splendid location for a hatchery as the distribution could be done by boat. Aside from its purely practical feature as a fish hatchery, the plant would have an attractive feature which would be appreciated by the public, more especially if there was an aquarium operated in connection with the hatchery. There is no doubt but what a fish hatchery, where lake trout would be hatched in the winter, and pike perch and white perch in the spring, would prove a great attraction, thus serving a double purpose at one cost.

In addition to breeding lake trout, pike perch and white perch at a park hatchery, a large number of bass might be hatched to sup-

ply some of the waters south of Chicago.

There is no doubt but what the best all-round game fish for Illinois is the large-mouthed black bass. This fish does well in the lively waters of the northern part of the State and thrives in the more sluggish waters of middle and southern Illinois. So far, the State has hatched this bass exclusively. But there are waters in which this fish will not do well, whereas such waters are peculiarly suited to the small-mouthed black bass.

The large-mouthed variety of the bass is essentially a lake or pond fish. The small-mouthed variety is a river or creek fish, preferring running water in streams with a gravel and stone bed.

As we have many streams of this kind, unsuited to the largemouthed black bass, it would appear to be the part of wisdom to begin to think about a small-mouthed bass plant to take care of these waters.

The Kankakee River, for example, is a small-mouthed bass stream. There is a good flow of water in this river, and an almost continuous fall from the Indiana line to the end of the river. There is an abundance of crayfish in this water, a kind of food especially suited to the small-mouthed bass.

There are a few places on the Kankakee River where the large-mouthed bass will thrive, but the greater part of this stream should be stocked with small-mouthed bass and pike perch.

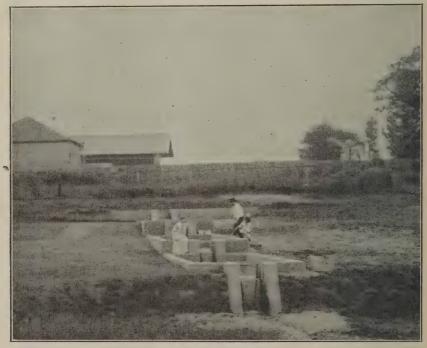
There are a few tributaries of this river, where the small-mouthed bass will thrive. And then there are other streams in the State where this fish will do well, whereas the large-mouthed variety will not. It would be well, therefore, to take up the breeding of the small-mouthed bass for the purpose of stocking such streams as are peculiarly suited to this fish.

One of the most important of our commercial fishes is the buffalo fish. For a number of years the supply of this fish has been steadily decreasing. While it is of a similar type to the German carp, it is not quite so hardy, and does not appear to be able to keep pace with the carp in the struggle for existence. In recent years the increased value of land along the Illinois River and other large streams has made it advisable to reclaim thousands of acres of land that formerly furnished good breeding and feeding waters for fish. The buffalo fish has suffered more on account of the reclaiming of overflowed

land and shallow lakes than the carp. If this fish is to hold a proper place in our list of commercial fishes, artificial hatching will be

necessary.

For a number of years the Federal Bureau of Fisheries has been trying to do something in the way of hatching buffalo fish. But so far the work has not met with the success that is had in hatching other species of fish. It is difficult, in the first instance to get good spawn. Then there is some trouble in hatching. The fry do not swim up readily and for that reason there is danger of smothering in the jars. A number of methods of hatching this fish have been tried, but up to the present time only partial success has resulted. However, a fair percentage of good eggs may be hatched—sufficient to



Spring Grove Trout Ponds.

warrant the State in undertaking the work of hatching this fish. An attempt was made this year to do something with this fish, but owing to the high water and other unusual conditions it was impossible to get spawn. Another effort should be made next season to hatch the buffalo fish at the Havana fish hatchery.

Not having had a fish car for use in the distribution of fish during the past year it was not possible to make such a distribution as might be desired. Before the next distributing season opens we will have our new fish car and will be better able to serve the State in the work of distribution. The distribution of fish from the Spring Grove hatchery follows:

DISTRIBUTION OF BLACK BASS FROM THE SPRING GROVE BASS PONDS.

Date.	Where planted.	City.	County.	Applicant.	Ad- vanced fry.	Year- lings.
1914					1	
July 10	Long Lake	Long Lake	Lake	Hon. T. Graham.	5,000	
July 10	Fish Lake Wooster Lake Round, Taylor &	Ingleside	do	John Breimer	5,000	
July 10	Round, Taylor &	.,00	ao	Geo. Rosing	5,000	
					10,000	
July 10	Gray's Lake	Grayslake	do	J. W. Schlosser	5,000	
July 10	Crystal Lake	Crystal Lake	McHenry	C.J. Wightman	5,000 10,000	
July 16	Mooseheart	Mooseheart	Kane	S. A. Roadtsrom	10,000	
July 16	Desplaines River	Downers Grove	Dupage	C. F. Davis	8,000	
July 16	Salt Creek	Hinsdale	do	J. W. Schlosser C. J. Wightman Fred Blocki S. A. Roadtsrom C. F. Davis G. E. Ruchty	8,000	
					15,000	
July 21	Diamond Lake	Libertyville	do	G. M. Ray, Illinois State	8,000	
July 21	Prison Pond	Joliet	Will	Illinois State	2 000	
July 21	Institution Ponds	Pontiac	Livingston .	Illinois State	3,000	
				Retormatory	5,000	
July 28	Channel Lake	Antioch	Lake	W. A. Fritsch	5,000	
Aug. 1	Ninnersink Lake	do	uo		5,000 4,000	
Aug. 4	Pistakee Lake	do	do		4,000	
Aug. 5	Lake Catherine	do	do	W. A. Fritsch Mrs. Nichols. Fred Hatch Wm. Stoffel C. E. Herman J. Gebreacht OceanGrove Hotel	5,000	
Aug. 5	Channel Lake	ao	do	W A Fritsch	5,000 5,000	
Aug. 6	Fox Lake	do	do	W. A. Pittoch	5,000	
Aug. 7	Griswold Lake	McHenry	McHenry	Mrs. Nichols	6,000	
Aug. 8	Dunn's Lake	Spring Grove	do	Fred Hatch	5,000 5,000	
Aug. 8	Bluff Lake	Antioch	do	C. E. Herman	6,000	
Aug. 8	Haney's Lake	Spring Grove	do	J. Gebreacht	2,500	
Aug. 11	Petite Lake	Fox Lake	do	OceanGrove Hotel	4,000	
	Fox River (Dutch				4,000	
2248, 10	Creek)	Johnsburg	McHenry	S. Smith	5,000	
Aug. 13	Petite Lake	Fox Lake	Lake	S. Smith Wm. Stoffel. J. McCabe F. E. Hansel. B. Stilling T. H. Graham J. H. Miller P. Flanders J. Dickhart G. M. Ray.	6,000	
Aug. 13	Meyer's Bay	Fox Lake	Lake	J. McCabe	6,000	
Aug. 13	Meyer's Bay	do	do	F. E. Hansel	3,000	
Aug. 13	Pistakee Bay	Johnsburg	McHenry	B. Stilling	3,000	
Aug. 14	Eox River	McHenry	McHenry	T. H. Granam	8,000 2,500	
Aug. 18	McCollum Lake	do	do	P. Flanders	5,000	
Aug. 20	Fox River	German Villa	do	T. Dielekant	3,000	
Aug. 21	Cedar Lake	Lake Villa	do	J. Dicknart	10,000	
Aug. 26	Lake Zurich	Lake Zurich	do		10,000	
Aug. 28	Bang's Lake	Waucanda	do		7,000	
Aug. 29	Ninnersink Creek	Spring Grove	do	G. M. Ray	5,000	
	ppcroffix Of CCR	Dering Grove			10,000	
1915 Mary 95	Flow Loles	Flow Tolland	30	Louis De Droft	DF 000	
				Louis DeProft		
May 26	Nippersink Lake.	do	do	Ira Simons Geo. Johnson	50,000	
May 30	Wauconda	Flow Lotvo	do	C. Herman	30,000	
June 2	Fox Lake	do	do	Peter Johnson	50,000	
June 4	Pistakee Lake	do	do	Thos. Cummings.	25,000	
June 4	Pistakee Lake	do	do	J. McHay	25,000	1,500
June 4	Pistakee Lake	For Lake	Lake	Geo Sawyer	15,000 25,000	1,500
June 5	Pistakee Bay	Johnsburg	McHenry	Ben Stilling	25,000	1
June 8	Pistakee Lake	Fox Lake	Lake	Frank Hanzell	25,000	
June 9	Green River	McHenry	McHenry	Hon Leach	50,000 15,000	1,000
June 15	Grass Lake	Grass Lake	Lake	John O'Connor	25,000	1,000
June 15	Grass Lake	do	do	Leonard Shober	25,000	
June 18	Armour's Lake	Melody	do	J. Ogden Armour		1,000
June 23	Long Lake	Long Lake	do	. Lion, I. Granam.	10,000	1,500 1,500
June 28	Duck Lake	Ingleside	do		25,000	
June 28	Pistakee Lake	Fox Lake	do	Howard Scott	50,000 50,000	
June 30	Pistakee Lake	do	do	Geo Busch	25,000	
	m' to a			Geo. Johnson. C. Herman J. C. Born. Peter Johnson. Thos. Cummings. J. McHay. Lincoln Park. Geo. Sawyer Ben Stilling Fránk Hanzell. Fred Justin Hon. Leach John O'Connor. Leonard Shober J. Ogden Armout Hon. T. Graham. Geo. Busse. Howard Scott Geo Busch.		
	Total				645,000	6,500

DISTRIBUTION OF PIKE PERCH FROM SPRING GROVE HATCHERY.

Date.	Where planted.	City.	County.	Applicant.	Ad- vanced fry.
1915					
	Pistakee Lake	Lake	Lake	Joseph Meeter	500.00
May 1	Grass Lake			John O'Connor	1,000,00
	McCollum's Lake	McHenry		E. L. Haves	1,000,00
	Crystal Lake		do	Fred Blocki	500,00
	Long Lake		Lake	Hon. T. Graham .	500,00
May 4	Dutch Creek	Johnsburg	McHenry	E. Haves	500,00
May 4	Round Lake			T. W. Renehan	500,00
May 5	Nippersink Lake			Lewis DeProft	500,00
May 5	Fish Lake			John Breimer	500,00
May 5	Pistakee Bay			B. Stilling	500,00
	Pistakee Lake			B. Stilling	500,00
	Sheldon Lake	Libertyville	do	Sheldon School	500,00
	Diamond Lake		do	P. G. Ray	500,00
	Gray's Lake	Grayslake		E. J. Druce	500,00
	Dunn's Lake		do		400,00
	Wooster Lake	Ingleside		John Breimer	400,00
	Fox Lake			Fred Boser	500,00
	Fox River	McHenry		E. Hayes	500,00
	Fox River		do		500,00
	Deep Lake	Lake Villa		J. L. Diechardt	500,00
	Bluff Lake Defiance Lake			W. A. Fritsch	500,00
	Joliet Lake			Capt. Clarkson	500,00 500,00
	Petite Lake	Fox Lake		A. Simons	500,00
	Pistakee Lake			H. L. Scott	500,00
	Myers Bay	Johnsbury		J. McKay	500,00
	Fox River		do	E. L. Hayes	500,00
	Fox River	McHenry	do		500,00
	Fox Lake	Fox Lake		Fred Burkett	500,00
May 10	Nippersink Creek	do	do		500,00
	Fox River		Kane	P. N. Munson	500,00
	Algonquin		Lake		500,00
	Rock River			A. M. Clavin	100,00
	Rock River	Rockford		do	100,00
May 12				do	100,00
May 13	Nippersink Creek				500,00
	Fox River	Johnsburg		E. Hayes	500,00
	Nippersink Creek	Spring Grove			500,00
	Total				18,600,00

In addition to the fish distributed that were hatched at our Spring Grove plant, several hundred thousand young and adult fishes have been rescued from the backwaters of our large rivers, and planted in streams and lakes that needed stocking. Most of the work was done from Havana, the fish taken having been distributed largely in the central and southern part of the State.

PROPERTY VALUES

PROPERTY VALUES.		
Spring Grove hatchery, 12.18 acres of land	\$2,436	00
Buildings	5,500	00
Ponds and other improvements	4,700	00
Equipment	420	00
· ·		
Total	\$13,056	00
Havana hatchery.		
Building on leased land	\$1.000	00
Equipment	492	
Total	\$1,492	00
FISH IN PONDS.		
Adult black bass	1.0	000

Black bass yearlings..... *30,000

FISH IN PONDS—Concluded.

Adult rainbow	trout	500
	fingerlings	
Brook trout fir	ngerlings	1,000

* Estimated.
Respectfully submitted,

C. B. WHITFORD, State Fish Culturist.

REPORT OF FIRST DISTRICT WARDEN.

To the Game and Fish Commission:

The First District comprises ten counties, and is patroled by ten deputy game and fish wardens with territories and headquarters assigned as follows:

Name of deputy.	Territories.	Headquarters.
	. Kendall and Kane Counties	Aurora.
Vin. Buszkiewicz	.Will and Grundy Counties	Lemont.
Frank Quinlan	:Lake County	Fox Lake.
	.Dupage County	
	. Kankakee and Iroquois Countie	
Edw. L. Hayes	.McHenry County	
	. Cook County	
	.Calumet Lake	
John J. Smith	. Boat docks and depots	Chicago.
Alb. M. Kelly	.Boat docks and depots	Chicago.

As provided for in the law, each deputy warden must devote his entire time to the department, reporting daily to the district warden, the territory covered and the nature and amount of work performed.

During the hunting season the deputy wardens patrol their entire territories, but spend a greater part of their time in the places most frequented by hunters and where game abounds. The streams and lakes within this district occupy the time and attention of the deputies during the fishing season. Chicago being the big receiving point for commercial shipments of fish and game from all parts of the country, two deputies devote their entire time to looking after the incoming and outgoing shipments at depots, express rooms and boat docks. Contraband shipments, on being detected, are seized in the name of the State and sent to the State and charitable institutions around Chicago. By persistently confiscating such shipments, the department has greatly reduced the amount of illegal game and fish getting on the market.

Since the primary object of this department is to conserve the fish and game of the State, the deputy wardens have been instructed that arrests and convictions are desired only when necessary for the better enforcement of the law. That the people of this district have taken kindly to this policy is evidenced by the comparatively few violations and the great number of fishing and hunting licenses sold during the year. However, the deputies have at times detected gross and constant violators, and these have been made to feel that the fish and game laws of the State are not to be trifled with, and a violation of same will meet with a speedy and just penalty, as the following report will show:

Arrests.	Fines.	Arrests.	Fines.
July, 1914— 3	.\$ 35 00	Oct., 1914—31	\$170 00
Aug., 1914—10	. 35 00	Nov., 1914—14	165 00
Sep., 1914—11	. 52 50	Dec., 1914—11	60 00

Arrests.	Fines.	Arrests.	0	Fines.
Jan., 1915—21	\$ 40 00	May, 1915— 9	\$	77 50
Feb., 1915— 3	67 50	June, 1915—13		97 50
Mar., 1915—24	45 00		_	
Apr., 1915— 6	42 50	Total		887 50

It is the consensus of opinion of the deputy wardens and of the huntsmen and fishermen throughout the district that all kinds of fish and game will show a decided increase.

In Cook County, few prairie chickens and quail are found, but are on the increase. Rabbits and squirrels, not plentiful but increasing. Waterfowl and shore birds, scarce, except toward the northern part of the county, with no noticeable increase. Pheasants can be found in that part of the county lying north and west of Chicago, and show a remarkable increase.

The Desplaines River, Calumet River and Calumet Lake, along with Lake Michigan furnish the principal fishing waters in the county. In the Desplaines River, black bass, crappies, pickerel, sunfish, catfish, carp, buffalo and red horse are found, and all on the increase. The Calumet River and Calumet Lake abound with carp and buffalo, and show an increase in game fish. Lake Michigan is stocked with all kinds of lake fish, but a decided decrease is noticed in lake trout and white perch.

Dupage County shows a big increase in rabbits and squirrels; prairie chicken and quail are not plentiful, but will show a slight increase; practically no waterfowl or shore birds will be found in the county, but an increasing number of pheasants is noticed.

There is a slight increase of game fish in the Dupage River,

which is the principal fishing stream of the county.

In Grundy County, prairie chicken, quail and rabbits are very plentiful, and show a large increase; some squirrels can be found, but show a slight decrease; waterfowl and shore birds show a big increase.

The Illinois River and Mazon Creek are the principal fishing streams in this county and abound in bullhead cat and channel catfish. There has been a noticeable increase in the game fish in these two streams.

In Kankakee and Iroquois Counties can be found a goodly number of prairie chicken and quail, few waterfowl and shore birds, and an abundance of rabbits and squirrels, all showing a decided increase.

The Iroquois River, Kankakee River and Rock Creek furnish the fishing in these two counties. In the rivers can be found black bass, crappies, sunfish, wall-eyed pike, carp, buffalo, red horse and catfish. The game fish show an increase.

In Kane and Kendall Counties there is a noticeable increase in prairie chickens; quail can be found in goodly numbers, show no increase. A few waterfowl and shore birds can be found in season, but with no increase. Rabbits and squirrels are plentiful in all sections of these two counties.

The principal fishing streams in these two counties are the Fox, Big Rock and Little Rock Rivers, and Blackberry and Mill Creeks. The fish found in these streams are carp, bullhead catfish, suckers,

rock bass, black bass, pickerel, blue or channel catfish in large numbers. Some bluegills, sunfish and crappies are found. Rock bass shows a large increase, while black bass and other game fish show no increase.

In Lake County there has been a big increase of pheasants and prairie chickens; quail is scarce, showing no increase. There is waterfowl in abundance in season. Rabbits and squirrels are plentiful and show an increase.

Besides the Fox and Desplaines Rivers, Lake County embraces 52 lakes, the more important being Fox, Nippersink, Pistakee, Long, Channel, Marie, Bluff, Catherine and Grass, all of which abound in black bass, wall-eyed pike, pickerel, silver bass, crappies, bluegills, bullheads and cat. All of these fish are increasing, and especially is this true of black and silver bass.

In McHenry County prairie chickens can be found in all parts of the county, and show a large increase. Quails are few and show no increase. A few pheasants can be found. Rabbits and squirrels are plentiful and can be found in all parts of the county. Waterfowl and shore birds are scarce and possibly show a slight increase. As in Lake County several small lakes along with the Fox and Desplaines Rivers afford excellent fishing. In Pistakee, Griswold, Slocum, Crystal, Defiance, Silver and Bang's Lakes there is an abundance of black bass, pickerel, pike, sunfish, perch and most all fresh-water fish. All showing a large increase.

In Will County a 50 per cent increase in prairie chicken and quail is a conservative estimate, with a slight increase in pheasants. Shore birds show an increase over preceding years, but are not numerous; while waterfowl are more plentiful and show a large increase; rabbits and squirrels have shown a large increase, and are plentiful in all parts of the county. The Desplaines and Dupage Rivers, along with several abandoned quarry holes, constitute the fishing waters of Will County. In the rivers there has been a large increase of crappies, bullheads and carp. Owing to the continued high water it is impossible to determine what condition the pickerel and black bass are in, or if there has been an increase. The quarries have a nice supply of black bass, and will show an increase.

In its efforts to conserve and propagate the game of the State, the State Fish and Game Commission has set aside four tracts of land in the first district for game reservations. These reservations contain each nearly 1,000 acres of land, and were selected because nature has endowed these tracts with food and cover peculiarly suited to the propagation of prairie chicken and quail. The reservations have been posted and feed for birds has been planted. Two of the tracts, namely one in Cook County between Harvey and Blue Island, and one in Lake County near Round Lake are devoted to the conservation and propagation of the prairie chicken, while the remaining two preserves, one in Kankakee and one in Will County, are devoted to the propagation of quail. It is a known fact that our game birds suffer more from the snows of our winters than they do from the sportsman's gun. These reservations, by supplying food and shelter, have solved the problem of carrying quail and prairie chicken over the winter season, at a very low cost.

The following is an inventory of the State property under my care and control:

One long table, \$18; 3 small tables, \$16; 1 high desk and stool, \$29; 8 plain chairs, \$16; 4 desk chairs, \$28; 2 roller-top desks, \$75; 2 flattop desks, \$100; 1 Oliver typewriter No. 5, \$40; 1 card file, \$3; 1 filing cabinet, \$24; 1 coat rack, \$2.50; 1 "clipless" paper fastener, \$3; 1 "challenge" eyelit press, \$3; 6 brass cuspidors, \$2.40; 2 wire baskets, 80 cents; 1 wicker basket, 75 cents; 2 electric desk fans, \$19.70; 1 desk extension for 'phone, \$3.50; 3 rugs for office, \$90; 1 mailing scale, \$1; 1 boat bought by old fish commission, \$40; 1 boat bought September, 1913, and equipment, \$465; 2 Green Bay hunting boats, \$55; 1 tunnel boat and equipment, \$600; 1 ferroboat and equipment at Fox Lake, \$130; 1 skiff, Fox Lake, \$30; 1 skiff, Calumet Lake, \$30; 1 cruiser and rowboat with ferro attached, and equipment, \$2,532; 1 rowboat, \$15.

For the improvement of the work in this district, I would suggest that more deputies be assigned to this territory. The district is large and the conditions are such that ten deputy wardens can not cover the

counties as they should be covered.

An aid to the deputies who are now working country territories would be to furnish them with low-priced automobiles, so that they would not be under a handicap when trying to follow the modern hunter, whose mode of travel is by auto. In traveling by train, the deputies can hit only the main roads and such places as the huntsman is most seldom found in. To walk or drive is so slow that nothing can be accomplished. Were the deputies supplied with an automobile, they could cover their territories more frequently and more thoroughly. More violators would be detected, and I believe the protection given especially to game in this manner would warrant the extra expense involved.

Respectfully submitted,

H. C. WAGNER, District Warden.

Headquarters, Chicago.

REPORT OF SECOND DISTRICT WARDEN.

To the Game and Fish Commission:

District No. 2, having 1,000 square miles of territory, lies in the extreme northwest part of the State, bounded on the north by the state of Wisconsin and on the west by the Mississippi River, and in one of the best farming communities in the State. Fifteen counties, which are as follows, comprise this district:

Jo Daviess, Winnebago, Carroll, Dekalb, Whiteside, Mercer, Bureau, Stephenson, Boone, Ogle, Lee, Rock Island, Henry, Putnam, La Salle.

The office of this district is at Sterling. Eleven deputies take

care of this territory:

John H. Engels, Galena, Jo Daviess and Stephenson Counties; J. R. Bartlett, Rockford, Winnebago and Boone Counties; C. W. Vennum, Savanna, Carroll County; William, Dixon, Ogle County; Chas. Rabbit, Amboy, Lee County; A. A. Hennis, Sandwich, Dekalb County; Roy L. Phelps, Sterling, Whiteside County; E. E. McDole, Rock Island, Henry and Rock Island Counties; Charles Ditto, Keithsburg, Mercer County; John F. Pyszka, La Salle, Bureau and that part of

La Salle County north of the Illinois River; J. W. Clifton, Streator, Putnam and that part of La Salle County south of the Illinois River.

In August, 1913, Rock River, which flows wholly within this district, was set aside as a fish preserve, being the first stream in the State to be made a preserve. As to the result, it has met the approval of the people not only of this district but so much so that other waters have since been set aside.

The main tributaries of the Rock River, which are also fish preserves, are the Kishwaukee, Pecatonica and Green Rivers. Many small creeks also connect, which afford fine bass fishing. Pike are also found. This year shows a big increase in the crappie, which makes good pole fishing; catfish are plenty, but owing to the fact that no seining is allowed in preserves, the carp and buffalo are getting

very thick and will need attention this fall.

Several lakes, sloughs and ponds in the western part of Whiteside, Carroll and Jo Daviess Counties along the Mississippi have also been set aside as preserves. It has proven satisfactory in that vicinity also. A small part of the Fox River, which runs through La Salle County, has recently been placed into a fish preserve. With all these preserves and the Mississippi River on the west side, and the Illinois River in La Salle County, which are commercial streams, the entire attention of the deputies is needed during open waters. When the waters are closed or frozen, the hunting then requires their attention the balance of the year.

As to the increase, will say that there is a gain in the game fish in the district. As to the commercial, it is about the same as other

vears.

During the year a lot of rescue work has been done. Ponds and overflows were seined out and the fish placed in streams, thus saving hundreds of thousands of small fish that would have perished during the winter and through the drought in the fall.

The deputies in this district not only have the respect of the lawabiding hunters and fishers, but also the commercial fisherman, and former violators, as they are aware that we now have a law and that

law is to be enforced.

Prairie chicken and quail show an increase over last year, but I think we would have had a much larger increase had it not been for the wet season, which drowned out many nests. Quail may be found in every county in the district, but chickens are mostly in the south and western part of the district.

Very few waterfowl hatch in the district. We have a small part of the Illinois River, but it is a little too far north for hatching. All

we have is the flight and a very few shore birds.

All the pheasants we have are the few that have been sent in here. They don't seem to do very well here. I think there is too much open field here for them. Plenty of squirrel and rabbits here, about the same as last year, but the elimination of ferrets will increase the rabbits next year. This change seems to meet the approval of the people.

With the law we have now there is no reason, if enforced, why there should not be a remarkable increase in both fish and birds in the

next few years.

ARRESTS AND FINES.

134

Amount of fines assessed	
Total	

Five cases bound to grand jury, yet to be settled.

Number arrests

One fine of \$25.00 went to county, as it was for violation of State quarantine.

The balance of fines were waived or served out in the county jails.

I will say that this really covers only ten months of the year, as during the months of January and February hunting was eliminated from the district; eleven counties out of the fifteen counties were under quarantine on account of foot and mouth disease. All wardens and deputies acted as quarantine officers. During that time one arrest was made in Dekalb County by Deputy A. A. Hennis for violating the quarantine. After that no one tried to hunt. This also hurt the sale of hunting licenses and this accounts for the falling off in the license sale of the district.

INVOICE OF STATE PROPERTY.

AT STERLING.

One roll-top desk, \$28.50; 1 typewriter desk, \$15.90; 1 filing cabinet, \$19.80; 1 desk chair, \$7.20; 1 typewriter chair, \$5.70; 1 Monarch typewriter, \$100.00; 2 office chairs, \$8; record books, office supplies, etc.; 1 motor boat (Flora D.), \$500; 1 ferro, motor and rowboat, \$125.

AT SANDWICH.

One ferromotor, \$85; 1 tent, \$23.49; 2 folding cots, \$5.

AT ROCKFORD.

One ferromotor and rowboat, \$125.

AT SAVANNA.

One gasoline launch (23 feet 8 inches long, E. H. Anderson 10-horsepower engine), \$100.

AT GALENA.

One gasoline launch, \$100. Total, \$1,248.59.

Respectfully submitted,

A. M. CLAVIN, District Warden.

Headquarters at Sterling.

REPORT OF THIRD DISTRICT WARDEN.

To the Game and Fish Commission:

District No. 3 with headquarters at Havana, Ill., is one of the most important districts in the State in the matter of the production of game and fish. Practically 85 per cent of the commercial fish that are caught in the State come from this district, the Illinois River being the principal producer. The Mississippi River, which borders

this district from the northern line of Henderson County to the southern line of Pike County, is also a great producer of carp, buffalo, cat-fish, shovelfish, sunfish, crappie and a few sturgeon. The principal kinds of fish caught for commercial purposes in the Illinois River are carp, buffalo, catfish and sunfish. A few years ago the amount of fish shipped from this district was from twenty to twenty-four million pounds per annum, but it has decreased until at the present time only about eight million pounds are shipped annually, the greatest decrease being most noticeable in the number of buffalo. Numerous levee districts have been formed, which destroyed the spawning and breeding places of the fish. This is the principal reason of the decline in the annual production of fish. Within a radius of twenty miles north and south of Havana, located in Mason County, we have, without doubt, the best black bass fishing grounds in the State. Thousands of people come here every year to participate in this sport.

In this district there are twenty-two counties having an area of 12,242 square miles. Eleven counties border on the Illinois River and five on the Mississippi. This district has 175 miles of water frontage on the Illinois River and 100 miles on the Mississippi, which necessitates the use of nine fast motor boats, which are used daily by the deputy wardens in patrolling the water looking for violators of the fish and game law. We have boats and men stationed at Peoria, Liverpool, Havana, Beardstown, Meredosia, Pearl and Quincy. During the year ending July 1, 1915, this district had fifteen regular deputy wardens, whose duties and territories were assigned as follows:

John C. Ryan, with headquarters at Peoria, does river patrol work from Copperas Creek Locks to Henry, as well as inspect all markets

between these two points.

W. H. Linsley, with headquarters at Mapleton, inspects the markets at Peoria and does patrol service through Peoria, Stark and Marshall Counties in his automobile, the service of which he donates to the State.

J. W. Barnes, with headquarters at Delevan, looks after the markets at Pekin and patrols Tazewell and Woodford Counties.

H. H. Edwards, with headquarters at Pekin, works with me on the State boat, Margaret V., which is used in continuous patrol service from Henry to Kampsville. These trips are made for inspection of the markets and enable me to keep in close touch with the operations of the different wardens at all river points.

H. E. McLaren, with headquarters at Rushville, patrols Cass and Schuyler Counties, also using his own machine, the service of which

he donates to the State.

John Euteneuer and Henry Allen, with headquarters at Havana, do patrol duty along the entire river, assisting other deputies in their work. Very often it is necessary to have three or four men work together.

John B. Connor, with headquarters at Mt. Sterling, has a boat at Meredosia and together with Adolph Kastner, whose headquarters are Pittsfield, they patrol the river from Meredosia to Pearl, also looking after violations in Scott, Pike and Brown Counties.

Chas. E. Clarke, with headquarters at Quincy, patrols the Mis-

sissippi River and has charge of Adams and Hancock Counties.

Rodney C. Turner, with headquarters at Canton, patrols the Illinois River along Fulton County and as far north as Pekin. He

also looks after McDonough County.

J. J. Porter, with headquarters at Springfield, is an inspector at terminal points examining fish shipments and covering Sangamon County, and doing patrol service on the Illinois River during the hunting season.

A. E. Estill, with headquarters at Petersburg, has charge of

Menard and Logan Counties, doing patrol work.

T. W. Doherty, with headquarters at Galesburg, has charge of Warren, Henderson and Knox Counties, doing patrol work and inspecting fish shipments.

G. J. Dowell, with headquarters at Franklin, has charge of Mor-

gan County, doing patrol work.

There are over 50,000 hunters and 2,500 commercial fishermen in this district, and it is hard for a few men to cover the entire territory and prevent all violations; but there has been a very noticeable decrease in the number of violations during the last year, owing to the continuous activity of these deputy wardens and the plan that has been adopted in trying to educate the public to work in conjunction

with the Fish and Game Department in preventing violations.

The most extensive hunting clubs and game preserves are located in this district, and, during the duck-shooting season, the men are kept very busy and are compelled to be out frequently at night, as well as during the day. Our busiest season is from September 1 to December 15. During the winter months, when the river is frozen over, our work is comparatively light and at this period all our boats, which were brought in at the close of the season, are overhauled, painted and repaired, and as much of this work as possible is done by the deputy wardens, to save expense to the State. When the season opens, the boats are sent back to their different stations along the river.

In the spring of the year, when the hatchery, which is located at

Havana, is in operation, we distribute fry, and other fish.

During the fish-distributing season from six to twelve extra men are employed. It is the intention of the Fish and Game Commission to stock every public river, stream and lake in the State with fish that are suitable for the water to be stocked. When this work is completed the general public will be enabled to have good fishing in practically

every county in the State.

During the closed season, which ended July 1, fewer violations occurred than at any time within the history of the State. Out of forty markets on the Illinois River all except three closed voluntarily when the closed season began. Of the three that remained open, two of them handled legal foreign fish and the other one attempted to handle Illinois River fish. He was arrested, prosecuted and convicted on several different counts. Some of the suits against him are still pending.

The past winter was very hard on the quail in this district, as thousands of them were frozen or starved to death and from the reports I have from different points in my district, the hatch of young quail has been very limited, the wet weather drowning them out. This year will show a very noticeable decrease of quail in every county.

There are quite a few prairie chicken in Brown, Pike, Henderson and Adams Counties. In Mason, Knox and Fulton Counties there are quite a few pheasants and the increase in their numbers is quite marked. There are a scattering few of these birds in all the counties in this district.

Rabbits and squirrels, also raccoon, are on the increase in all parts of this district.

I have received a number of reports of the increase in the number of wood ducks, which breed along the Illinois River bottoms. The Federal law prohibits the killing of these ducks.

I have reports from Fulton, Mason, Cass, and Schuyler Counties, where some of the largest private preserves are located, that there has been a very noticeable increase in the number of Mallard ducks which made this their breeding grounds. During the duck season last fall there seemed to be a noticeable increase over the previous year in

ducks, geese and shore birds.

In the Sangamon River bottoms there is a herd of wild deer, about thirty-five in number. These deer, originally owned by private parties, were turned loose a few years ago and they have gradually increased in numbers.

During the past year there were fifty arrests made in this district, \$660.00 in fines collected, and several cases are still pending in the courts. A great many hoop nets, trammel nets and illegal fish were confiscated during the year.

INVOICE.

MARGARET V.-CRUISER.

Six life preservers, 4 live rings, 1 Amp meter, 1 battery tester, 1 rule, 2 hammers, 2 cushions, 1 row line, 1 stern line, 1 gas funnel, 2 anchors, 1 bow light, 1 green light, 1 red light, 1 stern light, 1 search-light, 1 lantern, 1 160-horsepower battery, 2 monkey wrenches, 11 small wrenches, 1 saw, 3 screwdrivers, 1 fire extinguisher, 3 files, 1 clock. Total value, \$3,000.00.

ANNITA M.—AT PEORIA.

One Remy coil, 1 Remy magneto, 1 McCord oiler, 2 life preservers, 1 whistle, 1 running light, 1 white light, 1 cushion, 1 fire extinguisher, 1 anchor, 1 16-horsepower Peerless engine. Total value, \$200.00.

OLGA M.

One Remy coil, 1 Remy magneto, 1 McCord oiler, 1 running light, 1 white light, 1 cushion, 1 fire extinguisher, 1 anchor, 2 life preservers, 1 16-horsepower Peerless engine. Total value, \$200.00.

WALTER M.

Two life preservers, 1 anchor, 2 lanterns, 1 hand pump, 1 two-cylinder coil, 2 oil cans, 2 spark plugs; equipment and engine formerly in this boat has been placed in Frances D. Total value, \$50.00.

FRANCES D.

One 22-foot flat with Ferroengine, 2 lanterns, 1 horn, 1 fire extinguisher, 2 life cushions, 1 coil box. Total value, \$150.00.

One double-bow hunting boat, \$10.00; 1 flashlight, \$1.00; 1 Ferro-out-board motor, \$60.00; 1 14-foot boat, \$25.00; 2 hunting skiffs (\$20.00 each), \$40.00; 1 20-foot tunnel boat with top ("Gwendolyn" at Meredosia), \$380.00; 1 24-foot flat, \$20.00; 6 five-gallon gasoline cans, \$3.00; 1 100-pound anchor, \$5.00.

Total value, \$544.00.

BUILDING AND EQUIPMENT AT HAVANA.

One metal building 25 by 55, \$350.00; 1 windlass, \$15.00; 1 rope. 2 inches by 175 feet, \$12.00; 100 feet of 1-inch rope, \$2.00; 3 wire back stops, 12 feet long, \$6.00; 8 boathooks, \$8.00; 1 rowboat, 16 feet. \$10.00; 1 shipping barge, \$3.00; 1 oil tank and house, 300 gallons, \$25.00; 1 oil tank and house, 160 gallons, \$20.00; 1 oil tank, 50 gallons, \$5.00; 1 60-yard gar seine, \$5.00; 1 90-yard gar seine, \$10.00; 1 400-yard fish seine, \$50.00; 1 60-yard minnow seine, \$5.00; 1 wheelbarrow, \$1.50; 1 vice, \$2.50; 2 dynamos, \$50.00; 1 fire extinguisher. \$7.00; 1 bundle minnow web, \$5.00; 2 push paddles, \$2.00; 2 shovels, \$1.00; 1 oil stove, \$3.00; 2 pairs oars, \$2.00; 1 small tool house, \$10.00; 1 live box, \$10.00; 1 boathouse, \$25.00; 1 log float with spuds, \$35.00; 220 feet track, \$30.00; 3 gasoline engines, McFadden, Cushman, Copperjacket, \$30.00; 1 anchor chain, 60 yards, \$8.00; 2 anchors, \$2.00; 1 canvas cot, 50 cents; 2 bully blocks, 50 cents; 2 braces, 10 bits, \$4.00; 1 fish tow box, \$2.00; 1 brass searchlight, \$5.00; 1 pair ice tongs, 75 cents; 1 ax, 50 cents; 2 iron pinch bars, \$1.00; 1 handsaw, 50 cents; 1 hand ax, 50 cents; 4 woodhorses, \$1.00; 1 12-foot ladder, \$1.00; 1 willow cot, 25 cents; 3 camp stools, 75 cents; 1 wood launch hull, 28 feet long, \$40.00; 1 iron launch hull, 16 feet long, \$5.00; 1 iron launch hull, 20 feet long, \$6.00; 1 iron flatboat, 22 feet long, \$15.00; 6 cork life floats, \$5.00; 1 boat car, 30 feet long, \$40.00. Total value, \$879.00.

INVENTORY OF STATE CABIN BOAT, HAVANA, ILL.

Four comforts, 1 blanket, 8 pillows, 11 sheets, 18 pillowcases, 4 red tablecloths, 14 napkins, 26 towels, 1 pump, 1 2-gallon coal oil can, 1 ice pick, 1 fire extinguisher, 4 wicker chairs, 2 armchairs, 1 ice box, 1 refrigerator, 1 pair ice tongs, 1 bucket, 1 5-gallon gasoline can, 1 Edison storage battery, 1 extension table, 1 china cupboard, 1 alarm clock, 1 granite baker, 1 granite bucket, 1 granite dish pan, 1 granite cake pan, 2 granite saucepans, 1 granite teakettle, 1 granite water bucket, 1 granite washbasin, 2 granite spoons, 1 dipper, 1 dish drainer, 1 fish knife, 1 bread knife, 2 carving knives, 1 skimmer, 1 pancake turner, 3 forks, 1 potato masher, 1 egg beater, 1 slaw cutter, 1 nutmeg grater, 1 sieve, 1 hand ax, 1 4-hole gasoline stove, 1 oven, 1 aluminum percolator, 1 aluminum teapot, 1 aluminum teakettle, 1 aluminum skillet, 3 aluminum saucepans, 2 aluminum large kettles, 1 aluminum double-boiler, 1 aluminum pie plate, 1 aluminum cake pan, 2 aluminum cups, 1 aluminum dipper, 1 aluminum griddle, 1 spatula, 3 lids, 10 forks, 10 knives, 11 tablespoons, 9 teaspoons, 2 soup spoons, 9 large plates, 11 pie plates, 10 soup bowls, 1 pitcher, 1 sugar bowl, 2 covered bowls, 1 sugar shell, 2 salt shakers, 1 pepper shaker, 2 vegetable dishes, 1 gravy boat, 2 small platters, 2 large platters, 1 dozen bone dishes. 1 dozen individual butters, 7 sauce dishes, 1 lemon squeezer, 14 glasses, 1 wood spoon, 1 sanitary folding bed, 1 bed, 1 folding bed, 1 stand, 1 mattress, 4 sets of springs, 2 bedspreads, 6 small pictures, 3 window shades, 10 sash curtains, 2 portiers (crash), 1 cabin boat. Total value, \$400.00.

OFFICE FIXTURES.

One roll-top desk, new, \$65.00; 1 roll-top desk, old, \$10.00; 1 type-writer desk, \$20.00; 1 revolving chair, office, \$2.00; 1 revolving office chair, \$2.00; 6 leather-bottomed chairs, \$10.00; 2 wood-bottomed chairs, \$2.00; 1 cane-bottomed chair, \$1.00; 2 folding chairs, \$1.50; 2 office tables, \$5.00; 1 card index file, \$1.50; 1 rug, 9 by 12 feet, \$10.00; 1 carpet, \$5.00; 1 Monarch typewriter, \$50.00; 1 Edison rotary mimeograph, \$15.00; 1 electric fan, 16-inch, \$10.00; 1 wire waste-basket, \$1.25; 1 wire letter basket, 25 cents; 1 carpet sweeper, 50 cents; 1 swinging typewriter stand, \$2.00; 16 letter files, \$4.00; 1 small iron safe, \$10.00; 1 heating stove, \$5.00; 1 glass fish globe, 50 cents; 3 electric fixtures, \$3.00; 24 yards rug filling, \$9.00; 1 zinc for stove, \$1.00; 1 date stamp, \$1.00; 1 Victor talking machine, \$5.00; 1 letter scale, 50 cents; 1 doormat, 50 cents. Total value, \$253.50.

Respectfully submitted,

J. M. Entwhistle, District Warden.

Headquarters at Havana.

REPORT OF FOURTH DISTRICT WARDEN.

To the Game and Fish Commission:

The Fourth District is composed of the following named counties, with the number of square miles of territory and the total population of each, as follows:

0,		,			
	Square	Popu-		Square	Popu-
County.	miles.	lation.	County.	miles.	lation.
Livingston	1,030	40,465	Dewitt	406	18,906
McLean	1,166	68,008	Piatt	440	16,376
Macon	606	54,186	Vermilion	928	77,996
Champaign	1,000	51,829	Douglas	420	19,591
Edgar	648	27,336	Moultrie	354	14,630
Coles	520	34,517	Shelby	780	31,693
Christian	688	34,594	Clark	515	23,517
Cumberland	347	14,281	Jasper	503	18,157
Crawford	450	26,281	Fayette	692	28,075
Effingham	486	20,055			
Ford	480	17,096	Total	12,459	637,589

The twenty counties comprising the Fourth District are patrolled by ten deputy game and fish wardens, with territories and headquarters assigned as follows:

Names of deputies.	Territories.	Headquarters
Daniel WhalenAll tha	at part of Livingston County	west of
	Wabash Railroad	
	at part of Livingston County	
the	Wabash Railroad and all o	of Ford
	ıt y	
P. J. Flanagan McLea	n County	Bloomington.
S. A. EdwardsMacon,	, Christian and Dewitt Coun	t .Decatur.
	aign and Piatt Counties	
Jerry ShuckrowVermil	ion and Edgar Counties	Danville.
C. M. CochranMoultr	ie and Douglas Counties	Sullivan.
L. E. Monfort Shelby	, Coles and Cumberland Cou	intiesMattoon.
	e, Effingham and Jasper Cou	
John Tumey Clark	and Crawford Counties	Marshall

Each deputy is required to be constantly on the move, reporting each day the nature of work done. The one great object of this department is to conserve the supply of fish of the streams, and the birds and game of the fields and forests. The results of our work are not so much measured by the number of arrests and convictions made as it is the object obtained.

Most people desire to obey the law, when they know what the law is, therefore it is the first duty of deputy game and fish wardens to take particular pains to educate the people with whom they come in contact in the provisions of this law, and to impress upon their minds the great importance of conserving the supply of game and fish.

This kind of an educational campaign has been carried on in the Fourth District the past two years, and it has proven to be the right kind of a campaign. While the deputies are kind, considerate and courteous to all, yet those who violate the law have been made to feel the strong arm of the State, as the following report shows:

	No. of	Fines		No. of	Fines
Month.	arrests.	collected.	Month.	arrests.	collected
1914.			1915.		
July	6	\$ 40 00	January	6	\$20 00
August	12	140 00	February	1	15 00
September	4	135 00	March	1	
October	11	38 00	April	1	7 95
November	20	96 00	May	5	32 50
December	. 8	45 00	June	4	35 00
			Total	79	\$604 45

CONDITIONS AND KINDS OF GAME, BIRDS AND FISH FOUND.

Livingston County, Deputy Whalen reporting: Few prairie chicken are found northwest of Pontiac with number decreasing; in the same territory quails are to be found in increasing numbers. Few pheasants, rabbits and squirrels are found in all parts of the county, with small increase. The principal river in which fish are found is the Vermilion River. In this stream black bass, crappie, pickerel, sunfish, catfish, carp and buffalo are found. On account of pollution of the waters of this stream from sewerage and refuse matter from gas works and factories, the stock of fish is decreasing. (This is a State fish preserve.)

McLean County, Deputy Flanagan reporting: Pheasants are found in the vicinity of Barnes, Merna and Funk's Grove in increasing numbers. No prairie chickens are found in this county. Quails are found in increasing numbers in all parts of the county. There are few shore birds, in season, in decreasing numbers. Squirrels are found in all timbered places in increasing numbers. Rabbits are found in all parts of the county in about the same numbers as last year. Song birds are increasing everywhere on account of the sentiment among people that it is a crime to destroy the birds and their nests.

Fish: Streams and lakes in which fish are found are Macinaw, Kickapoo, Miller Park Lake, Heafer's Pond, McGregor's Pond at Heyworth, and Aldrich's Pond at McLean. Channel cat, bullhead cat, crappie, sunfish, ring perch and black bass are found in decreasing

numbers on account of dry season of fall of 1914, when waters dried

up in the streams, lakes and ponds.

Ford County and part of Livingston, Deputy Heckelman reporting: Few quails, prairie chickens, and pheasants are to be found in most parts of this territory. Quails are scarce; prairie chickens and rabbits are increasing. No waterfowls or shore birds found. Squirrels are found in increasing numbers in timbered patches. Few streams or other waters, therefore scarcely any fish. Pheasants are increasing.

Macon, Christian and Dewitt Counties, Deputy Edwards reporting: There is a very noticeable increase in numbers of quails, prairie chickens, doves, squirrels and rabbits over that of last year. There are a few wild ducks along the Sangamon River, and on the small lakes, sloughs and bayous adjacent thereto. These ducks have been there all year and have hatched their young in the covered places. There is also some increase in numbers of pheasants, but there is much complaint that cock pheasants are killing young quails.

Fish: In all the streams, small lakes and other waters where there is no pollution, the fish are increasing rapidly, which are of the following kinds: Bass, crappie and perch. The principal waters for fish are the Sangamon River, Salt Creek, and a number of small privately owned lakes near Decatur. Sewerage from the City of Decatur destroys all fish for a distance of eight or ten miles down the San-

gamon River.

Piatt and Champaign Counties, Deputy Tabaka reporting: In these counties prairie chickens are found in small numbers in all parts, on account of more wheat fields and early meadows for nesting places. There is some increase over last year. Quails are increasing nicely on account of farmers protecting them better. There is a good start of pheasants here, and they seem to be well protected and taken care of by the farmers. Squirrels and rabbits are plentiful and increasing.

Fish: The principal streams and fishing waters are the Sangamon, Salt Fork and Middle Fork and Crystal Lake, the latter owned by the City of Urbana. Kinds of fish: Carp, cat, sunfish, sucker, bluegill, crappie, chubs, black bass and buffalo. A decrease is noticed on account of dry weather last fall, when the smaller streams went

dry and the fish perished.

Vermilion and Edgar Counties, Deputy Shuckrow reporting: In these counties there is reported quite a number of quails and prairie chickens. Farmers are protecting the birds better than ever before, consequently the stock is increasing. Rabbits and squirrels are also on the increase. Pheasants are scarce. In season there are plenty of snipe, plover, woodcock and ducks along the North Fork, in Vermilion County. There are five streams in Vermilion County set aside as fish preserves, in which waters fish are increasing. These are Salt Fork, Middle Fork, North Fork, Little Vermilion and Big Vermilion. In these streams are to be found bass, bluegills, crappies and carp. In all timbered places are to be found squirrels and rabbits in increasing numbers.

Clark and Crawford Counties, Deputy Tumey reporting: Prairie chickens are plentiful in the western part of Clark County and in the northern part of Crawford County, and are increasing. Quails are scarce in Clark County, but are increasing and plentiful in Crawford

County. Rabbits are increasing and plentiful in Crawford County. Rabbits are increasing and plentiful in both counties. No waterfowls, only in the spring, and then only for a short time. There are few streams or other fishing waters in these counties. The Embarrass River runs through the southwest part of Crawford County, and is the best fishing stream, but on account of pollutions of the water from oil wells there are not many fish to be found there.

Fayette, Effingham and Jasper Counties, Deputy Pearson reporting: In these counties prairie chickens, quails, rabbits and squirrels are to be found in increasing numbers, all of which may be accounted for by reason of better protection, more favorable breeding year, and the further fact that farmers are not permitting so much hunting as in the past. Not many pheasants to be found in either county; few were ever distributed to this territory, and what were put here seem to not increase very well. Waterfowls and shore birds, in decreasing numbers each year stop here on their flight to the north; none stay here during the year. The principal fishing waters are the Kaskaskia, Little Wabash and Embarrass Rivers. In these streams all kinds of fish, found in the waters of the State, are found in increasing numbers. except German carp. The most noticeable increase in kind is the black bass in the Kaskaskia and Embarrass Rivers, which are now fish preserves. Besides the rivers named, there are a few small lakes, among which is Kennagga Lake near Effingham, which abounds in crappie, sunfish, black bass and bullhead cat. This lake is an ideal breeding place for fish, it being fed by springs and tile ditches, and since there has been given better protection the fish have increased very rapidly. There is also Skillet Lake near Vandalia. It, too, is well adapted for breeding fish, being fed by springs and ditches. In it is found bullhead cat, black bass, crappie and sun perch. There is a strong sentiment here for a closed season of three years on quails, and an open season for seining in fish preserves during the month of August.

Shelby, Coles and Cumberland Counties, Deputy Monfort reporting: In Shelby and Cumberland Counties prairie chickens are found in increasing numbers, while in Coles there are few and they are seemingly on the decrease. There does not seem to be much increase in quails in these counties this year; just what the cause is not known, unless it is the excessive wet weather during the nesting season. About the same number of squirrels and rabbits are to be found this year as last. Doves are reported to be very plentiful, a noticeable increase over last year. Waterfowls and shore birds are here only in their flights north and south, and then only in small numbers. Kaskaskia, Embarrass and Little Wabash Rivers are the principal streams in these counties, the first two being fish preserves. In these streams most all kinds of fish are found in increasing numbers, especially black bass. Reservoir Lake, owned by the City of Mattoon, is near the head of the Little Wabash, and has been stocked with fish by the State, and fish are fast increasing under the better protection

that is being given.

Moultrie and Douglas Counties, Deputy Cochran reporting: In Moultrie County prairie chickens are found in increasing numbers, especially in the vicinity of Sullivan, where close protection by the

farmers is given. Quails are found in brushy and timbered localities in increasing numbers. In both counties there are to be found many covies of young quails, and if nothing happens there will be good hunting next fall all around. Pheasants are scarce and hard to find. Squirrels, rabbits and doves are found to be increasing, doves being especially numerous in the stubble fields. Waterfowls in small numbers stop in the ponds and streams in their flight during the spring and fall, but few remain to nest.

Fish: The principal fishing waters are the Kaskaskia and Embarrass Rivers, both of which are State fish preserves. In these streams are found black bass, channel cat, crappies, sunfish, buffalo and a few carp. Since these streams have been set aside as preserves, hook and line fishing has been a real sport, and fishermen are securing some nice catches.

INVENTORY OF PROPERTY.

One Monarch typewriter, \$90.00; 1 typewriter desk, \$9.10; 1 floor rug, \$22.20; 1 automatic filing case, \$54.16; 1 office chair, \$8.05; 1 office desk, \$26.25; 6 office chairs, \$31.55; 1 feather duster, 75 cents; 1 broom, 50 cents; 1 wastebasket, 95 cents; 2 cuspidors, \$1.50; 1 ferroouter board boat, and motor, \$125.00; 1 14-foot rowboat, \$35.00. Total value, \$405.01.

While the members of the legislature were very considerate of the needs of revision of some of the provisions of the game and fish law, and while they gave us an increased number of deputies to patrol the territory of the State, yet they did not quite grasp the real situation as it exists, else they would have provided in the amended law enough men so that one deputy for each county could have been appointed. There is no man on earth who can successfully patrol three counties.

As a matter of economy in deputy warden's traveling expense, I would again suggest that, if a deputy consents to own and drive his horse and rig, that the actual money expended for feed for the horse should be allowed. One deputy in the fields, or driving through the country is worth a whole army of them riding railroad trains. Without his rig there are three ways a deputy can travel—walk, hire livery rig, or ride railroad trains. The first is too slow, since he has such boundless territory to look after, and he works only in the vicinity of his headquarters; the second is too expensive, and, if he goes by the third way, he only hits the high places and gets no where, especially he does not often get where he finds violators of the game and fish law.

Conditions differ in different territories and the district warden should work his men to the best advantage. For instance, in some counties there are numerous facilities for travel by steam and interurban roads, and a person may travel from place to place with very little loss of time waiting for accommodations; in some communities a horse and buggy is not necessary, that is not so much needed as in communities where facilities for travel are less.

Respectfully submitted,

Isaac S. Storm, District Warden.

Headquarters at Shelbyville.

REPORT OF FIFTH DISTRICT WARDEN.

To the Game and Fish Commission:

The headquarters of this district are at East St. Louis. Thirteen counties comprise the district as follows:

Calhoun, Greene, Jersey, Macoupin, Montgomery, Madison, St.

Clair, Bond, Clinton, Washington, Perry, Monroe and Randolph.

This district comprises 5,890 square miles. Eight deputy game and fish wardens have been working in this district for the past year.

The character of work done by the deputies in this district comprises the enforcement and suppression of violations of the law, as given in the game and fish laws.

This district is bounded by the Illinois and Mississippi Rivers on

the west the full length of the district.

We have a great deal of work keeping the fishermen from violating the law, and keeping the market fishermen from making illegal shipments. Moreover, as the Illinois River above this district abounds with numerous large fish, dealers and shippers, if they escape the vigilance of the wardens in that district, we have them to cope with here, as a great many of their shipments go through this district; also the Kaskaskia River, which passes through this district from northeast to southwest, together with its tributaries, has been set aside as a fish preserve, which action does not meet with the approval of a great many, and it is going to take a great deal of work to keep them from violating the law in this respect.

List of deputy game and fish wardens and territory to which they

were assigned on July 1, 1915:

P. A. Daum, headquarters at Carrollton, Greene County and Illinois River. Louis Sweney, headquarters at Jerseyville, Jersey and Calhoun Counties and Mississippi River.

J. P. Carroll, headquarters at Litchfield, Macoupin and Montgomery

Counties.

T. J. McCormick, headquarters at Granite City, Madison County. Wm. H. Harris, headquarters at East St. Louis, St. Clair County. J. B. Jones, headquarters at Trenton, Bond and Clinton Counties.

B. B. Holston, headquarters at Nashville, Washington and Perry Counties.

Chas. Schildroth, headquarters at Sparta, Randolph and Monroe Counties.

ARRESTS AND FINES.

Arrests, 103. Amount of fines collected and sent to State Treasurer, \$694.20.

Inventory of State property on hand July 1, 1915:

One-roll top desk, \$36.00; 1 swivel office chair, \$7.50; 1 rug, \$12.50; 1 rug, \$15.50; 1 couch, \$20.00; 3 shades, \$1.50; 6 oak chairs, \$31.00; 1 typewriter, \$75.00; 1 typewriter desk, \$27.00; 4 cuspidors, \$1.50; 3 letter files, \$1.50; 1 gasoline launch, known by name of Francis D., \$750.00; 1 gasoline launch, known by name of May Foy, \$225.00; 1 row boat, \$25.00; 1 row boat, \$35.00; total values, \$1,264.00.

Greene County: Game consists of prairie chicken, pheasants, quail, squirrel, dove and rabbit. Pheasants and prairie chicken scarce, and don't seem to increase. Great many young quail destroyed by wet weather; no increase. The principal fishing stream is the Illinois

River; not very many lakes and sloughs.

Jersey and Calhoun Counties: The kind of game found in these two counties consists of rabbit, squirrel, dove, duck, quail, snipe, and plover. Very few pheasants. Seems to be slight increase in all kinds of game in these two counties. The principal fishing waters are the Mississippi and Illinois Rivers, Macoupin Creek, and numerous small lakes and canals. Kinds of fish: cat, buffalo, carp, white perch, sturgeon, crappie and few of the different kinds of bass. Bass not very plentiful.

Macoupin and Montgomery Counties: Game consists of quail, prairie chicken, snipe, plover, dove, pheasant, duck, rabbit, woodcock, and squirrel. Increase in all kinds of game. The principal fishing streams are three forks of Shoal Creek, Lake Litchfield, Macoupin Creek, Chautaqua Lake, Mt. Olive Reservoir, Staunton Reservoir, Rinaker Lake, and Beaver Dam Lake. Increase in fish in these two counties.

Madison County: Game scarce, in western third of this county, plentiful in eastern two-thirds. Quail plentiful, prairie chicken plentiful in four of the northeast townships; an increase of 20 per cent from last year. This county abounds in numerous fish waters, the principal ones, of which are, Silver Creek, Horse Shoe Lake, Long Lake, Chouteau Slough, Grassy Lake, Smith Lake, McDonald Lake, Cahokia Creek, and numerous other private ponds and lakes. About 25 per cent increase in fish, with the exceptions of game fish which are scarce.

St. Clair County: Kinds of game found in this county: Ducks, geese, snipe, plover, brant, coot, rail, quail, dove, squirrel. About 20 per cent increase in game in this county. The principal fish waters are Mississippi and Kaskaskia Rivers, Silver Creek, Bluff Lake, Fish Lake, Pittsburg Lake, Cahokia Creek, and numerous small lakes. About 50 per cent increase in fish.

Bond and Clinton Counties: Quail not so plentiful, as wet weather drowned a great many young birds; also, the same applies to prairie chicken. Squirrel are plentiful in the greater part of this district. Pheasant scarce. Few ducks and snipe.

Washington and Perry Counties: Game found in these two counties consists of prairie chicken, quail, dove, snipe, plover, duck, geese, rabbit, squirrel and few wild turkey. Chicken on the increase. Squirrel plentiful. Increase in quail. The principal fish waters are the Kaskaskia and Muddy Rivers, Lake Calamus, Big Open, Mud, Swan, Half Moon, Horse Shoe, Muddy, Breese, Grassy and Open, Fish consists of channel cat, carp, buffalo, drumfish, mud, and yellow cat, perch and sun crappie and bass.

Monroe and Randolph Counties: Game consists of same birds as other surrounding counties. No increase in quail, on account of high water. Squirrel plentiful. Few wild turkey. Rabbit plentiful. Principal fish waters, Mississippi and Kaskaskia Rivers, Creek, Plum, Richland, Nine Mile, and Horse Creek, and numerous lakes and private fishing lakes and a large number of backwater lakes. Fish plentiful, except game fish which are scarce. Rabbits seems to be plentiful throughout this district, still a great many young rabbits were drowned in the bottom lands with high water. Gar are very

numerous in the Illinois and Kaskaskia Rivers, and destroy a great many fish.

Respectfully submitted,

T. F. Brunk, District Warden,

Headquarters at East St. Louis.

REPORT OF SIXTH DISTRICT WARDEN.

To the Game and Fish Commission:

The Sixth District occupies the extreme southern part of the State of Illinois and is composed of the following named counties:

	Sq.	Popu-		Sa.	Popu-
County.	miles.	lation.	County.	miles.	lation.
Alexander	237	22,741	Pope	364	11,215
Clay	468	18,661	Pulaski	192	15,650
Edwards	236	10,049	Richland	360	15,910
Franklin	430	25,943	Saline	380	30,204
Gallatin	325	14,628	Union	400	21,856
Hardin	194	7,015	Wabash	226	14,913
Jackson	558	35,143	Wayne	725	25,697
Johnson	340	14,331	White	512	23,052
Jefferson	590	29,111	Williamson	442	45,098
Lawrence	362	22,661			·
Marion	570	35,094	Total 22	7,749	393,172
Massac	238	14.200			

The above named twenty-two counties are patroled by the following named deputy wardens with their counties and headquarters assigned as follows:

Name of deputy.	Headquarters.	Counties.
J. B. Below	.Salem	Marion and Wayne.
Vane Charles	.Grayville	White and Edwards.
Frank N. Carrillon	.Murphysboro	Jackson and Williamson.
Clifton F. Cranear	Vienna	Johnson and Pulaski.
Louie Hogue	.Lick Creek	Union and Alexander.
Frank B. Hudelson	,Shawneetown	Gallatin and Hardin.
Arthur C. Lee	Lawrenceville	Lawrence and Wabash.
James Payne	Woodlawn	Jefferson and Franklin.
Earnest E. Rose	Xenia	Clay and Richland.
Henry S. Williams	.Broughton	Saline and Hamilton.
Elmer Casperson	.Metropolis	Pope and Massac.

Each deputy warden is required to devote his entire time to the service and make a daily report to the warden of his district as to the nature of his work and also where he intends to work the following day.

The following shows the number of arrests made by each deputy warden, the amount of fines assessed and the amount of said fines to be sent to the State Treasurer:

			Amount of
	Number	Amount	
	of		sent to State
Name of deputy warden.	' arrests.	assessed.	Treasurer.
J. B. Below	4	\$ 80 00	\$ 80 00
Vane Charles			
Louie Hogue	18	2 15 00	142 50
B. G. Merrill	1	10 00	10 00
M. R. Fakes, (warden)	6	45 00	22 50

			Amount of
	Number	Amount	fines to be
	of	of fines	sent to State
Name of deputy warden.	arrests.	assessed.	Treasurer.
James Payne		\$ 345 00	\$210 00
E. E. Rose	25	276 50	240 00
H. S. Williams		205 00	110.00
Payne and Williams	1	15 00	15 00
Payne, Williams and Hogue	1	10 00	5 00
Payne and Rose	2	20 00	10 00
Payne and Hogue		25 00	12 50
Rose and Below	1	2 5 00	12 50
Total	111	\$1,271 50	\$870 00

The above report shows the work done in the twenty-two counties of District 6 from July 1, 1914, to July 1, 1915, by the warden and seven deputies, which constituted the working force of said district during the time specified in the above report.

INVENTORY.

One Monarch typewriter, \$75.00; 1 motor boat, \$80.00; 1 ferroboat, \$80.00; 1 small skiff or rowboat, \$25.00; 1 gasoline launch, \$250.00; 1 binder for daily report files, records, books, etc., \$10.00; total, \$520.00.

District 6 is bounded on the north and west by Crawford, Jasper, Effingham, Fayette, Clinton, Washington and Perry Counties and the Mississippi River. On the south and east by the Mississippi, Ohio and Wabash Rivers. The above named rivers form almost two-thirds of the boundary line of this district, giving it a river front of over two hundred miles. These rivers furnish employment to hundreds of fishermen, but as the State of Illinois has no jurisdiction over the Ohio and only concurrent jurisdiction over the Wabash, it will derive but little benefit from the fishermen in the way of licenses as provided for in the Illinois Game and Fish Act of 1915. It will be quite different in regard to the Mississippi River as this State has jurisdiction over this river from the Illinois shore to the center of the stream. The city clerk of Carbondale, during the months of July and August, sold between two and three hundred hoop and fyke net licenses to the fishermen of Grand Tower and vicinity. I mention this only for the purpose of showing the good results being obtained from our new game and fish law and the members of the General Assembly should be praised for putting part of the burden of the expense of protecting our fish and game on the fishermen, for in the past about threefourths of the money paid to the State by the hunters for hunting licenses has been spent for the benefit of the fishermen. District 6 covers an area of over 7,000 square miles and contains more game than any other two districts in the State. There are a great many prairie chickens in the northern part of the district, a few squirrels, quail and rabbits.

In the central and southern part of this district, squirrels, quails and rabbits are found more plentiful and in Union, Johnson, Massac and Pope Counties are several flocks of wild turkeys. The lakes and marshy timbered lands of the Ohio and Mississippi River bottoms

furnish excellent feeding grounds for the various kinds of ducks and other migratory birds that visit this section during their northern and southern flight. Big Grassy Lake in Union County, owned and controlled by the Cobden Gun Club, which will be drained within the next two years, is one of the greatest duck roosts in the State of Illinois and should be owned and preserved by the Government for a resting place for the migratory waterfowls. Raccoon, mink, muskrat, skunk, opossum, otter, foxes and wildcats are found in various parts of this district.

Squirrels have increased in the last two years, but under the present law, they will undoubtedly decrease. The daily bag limit under the present law can not be enforced on account of the possession bag limit. If amendments were made to our present law to prohibit bird dogs running at large from April 1 to November 1, and also prohibit the use of pump and automatic and all other repeating or machine guns, our game birds and animals would increase very rapidly. The bird dogs in this district kill and destroy thousands and thousands of quail, doves and prairie chickens during the laying and breeding season of these birds.

Respectfully submitted,

M. R. Fakes, District Warden.

Headquarters at Carbondale.

SUMMARY OF LICENSE ACCOUNT

	Resi	dent lic	ense.	sold.		on-r		ld.	Fis	h lice	nse.
County.	Sent.	Returned.	Sold.	Value of license sc	Sent.	Returned.	Sold.	Value of license sold.	Sent.	Returned.	Sold.
AdamsAlexanderBondBooneBrown	3, 925 700 1, 325 875 775	961 136 215 78 186	2, 964 564 1, 110 797 589	\$ 2,223 00 423 00 832 50 597 75 441 75	5 5	5 5			15 10 15 5	6 7 9	9 3 6
Bureau	3,050 800 1,950 1,300 2,700	911 238 668 410 925	2,139 562 1,282 890 1,775	1,604 25 421 50 961 50 667 50 1,331 25	10 5 10	5 10	10	\$250 00	180 110 30 165 205	130 93 21 154 138	50 17 9 11 67
Christian	2,825 1,850 1,000 2,950 2,150	·972 435 161 349 476	1,853 1,415 839 2,601 1,674	1,389 75 1,061 25 629 25 1,950 75 1,255 50	5 5 5 25	5 3 5 24	2	50 00	75 10 30 165 55	65 6 24 155 38	10 4 6 10 17
Cook	19,475 2,275 850 2,125 1,050	2,595 342 310 494 463	16,880 1,933 540 1,631 587	12,660 00 1,449 75 405 00 1,223 25 440 25	60 5 	59 5	1	25 00	1,710 40 40 40 40	1,336 31 23 21	374 9 17
Douglas. Dupage. Edgar. Edwards. Effingham	950 1,675 1,300 600 2,300	417 502 327 132 416	533 1,173 973 468 1,884	399 75 879 75 729 75 351 00 1,413 00	5	5			30 15 100	23 13 66	2 34
FayetteFordFranklinFultonGallatin	2,200 1,000 2,875 3,750 650	449 478 667 919	1,751 522 2,208 2,831 456	1,313 25 391 50 1,656 00 2,123 25 342 00	5 5 5	5 3 2	2 3	50 00 75 00	35 45 5 55	29 17 4 42	28 1 13
GreeneGrundyHamiltonHancockHardin.	1,675 1,175 1,125 1,575 100	502 396 413 537 66	1,173 779 712 1,038 34	878 75 584 25 534 00 778 50 25 50	 5 	5			40 5 40 45	16 4 23 38	24 1 17 7
Henderson Henry Iroquois! Jackson Jasper	550 2,175 1,975 2,750 1,100	158 444 611 656 248	392 1,731 1,364 2,094 852	294 00 1,298 25 1,023 00 1,570 50 639 00	55 5 5	26 5 5	=29	725 00	10 60 35	53 29	2 7 6
Jefferson	1,775 975 1,650 525 4,775	285 145 297 195 1,003	1,490 830 1,353 330 3,772	1,117 50 622 50 1,015 50 247 50 2,829 00	10	7	3	75 00	20 90 155 265	15 80 136	5 10 19
Kankakee. Kendall. Knox. Lake. La Salle	1,775 775 2,850 4,175 5,050	689 273 730 1,039 880	1,086 502 2,120 3,136 4,170	814 50 376 50 1,590 00 2,352 00 3,127 75	10 5 5 25	10 5 5 24		25 00	60 10 75 320	38 5 44 97	22 5 31 223
Lawrence Lee Livingston Logan Macon	1,875 1,800 1,800 1,225 4,225	407 316 608 264 1,734	1,468 1,484 1,192 961 2,491	1,101 00 1,113 00 894 00 720 75 1,868 25	10 5	6	4	100 00	70 15 5 45 170	66 12 5 39 119	4 3 6 51
Macoupin Madison	5,350 8,075	2,110 1,231	3,240 6,844	2,430 00 5,133 00				•••••	85 380	51 297	34 83

FOR YEAR ENDING JUNE 30.

old.		Hu	inting			Remitt	ance.	Fish.			
Value of license sold	Deductions for express, etc.	Over payment.	Payment previous season's account. Deductions over payment previous year. Balance due.		Hunting.	Fishing.	Deductions, express, etc.	Over payment.	Balance due.		
\$ 70 00 25 00 6 25	\$ 6 95 10 3 27 2 37	\$ 53			\$ 15 00	\$ 2,216 58 422 90 814 23 597 75	\$ 70 00 25 00 6 25	\$05			
316 75 170 25 50 00 175 00 316 00	2 30 1 43 1 48	1 50 10 7 61 1 00 1 75				439 38 1,602 11 671 60 966 81 667 07 1,331 52	315 76 170 00 24 82 174 70 316 00	99 25 18 30		\$25 00	
50 00 1 00 30 00 36 25 61 25	3 96 70 2 72 4 26 1 30	12 35 52 1 00		\$5 75	4 65	1,392 39 1,110 55 622 40 1,947 49 1,279 20	39 90 1 00 29 70 30 65 61 25	30 10		10 00	
2,011 50 26 00 80 25	11 99 84 1 62 1 98 71	1 25 1 75			75 00	12,674 26 1,448 91 403 38 1,223 02 364 54	2,010 75 26 00 80 25 2 50			75 11 75	
35 00 10 00 141 50	2 56 3 66 80 36 4 54	1 60				397 19 876 09 730 55 350 64 1,411 66	34 83	17			
30 00 78 25 5 00 56 00	84 15 22 6 27 2 31	6 05 75 3 00 5 55				1,318 46 392 10 1,706 78 2,197 53 339 69	141 34 30 00 78 25 5 00 55 74	16			
53 50 25 51 75 50 00	2 83 3 09 1 92 2 78 10	3 50	- 14			879 42 581 16 532 08 775 77 25 40	48 30 25 51 75 39 90	20		5 00	
10 00 36 50 30 00	72 2 76 3 09 3 33 12	12 00 5 30 75			48 75 42 75 216 00 13 50	1,030 28 1,246 74 977 16 1,356 47 626 13	10 00 35 25 30 00			1 25	
20 25 75 00 110 50 274 50	1 13 1 31 1 93 1 02 3 18	1 56			278 38 3 00 5 50	837 99 621 19 1,085 57 246 48 2,821 88	10 25 75 50 110 20 269 50	30	\$ 50	10 00	
102 00 25 00 520 00 190 00	1 04 48 3 37 3 64 8 55	1 75 50 75 2 12				815 21 376 02 1,587 13 2,349 11 3,146 32	102 00 24 79 520 75 191 97	21	75 2 75		
20 00 30 00 25 25 79 50	1 25 6 14 1 43 1 76 2 94	50 25 3 75			17 28 56 83	1,200 25 1,089 58 835 99 722 74 1,865 31	20 00 30 00 2 23 25 25 79 50		2 23		
120 00 219 75	7 50 8 50	*****				2,422 50 5,124 50	119 70 222 05	30 45	2 75		

SUMMARY OF LICENSE ACCOUNT

	Resident license.						on-r		sold.	Fis	h licei	nse.
County.	Sent.	Returned.	Sold.		Value of license.	Sent.	Returned.	Sold.	Value of license s	Sent.	Returned.	Sold.
Marion	3, 525 1, 400 1, 705 575 1, 475	704 285 368 112 523	2,821 1,115 1,337 463 952		\$2,115 75 836 25 1,016 75 347 25 714 00	25	25			50 125 220 20 55	47 104 192 16 46	3 21 28 4 9
McHenry McLean Menard Mercer Monroe	2,675 2,800 775 1,400 1,600	545 776 284 651 395	2,130 2,024 491 749 1,205		1,597 50 1,518 00 368 25 561 75 903 75	5 5	5 4	1	\$ 25 00	20 40 25 20 25	14 28 16 14 21	6 12 9 6 4
Montgomery Morgan Moultrie Ogle Peoria	3,000 1,875 875 1,800 7,250	606 597 313 508 1,837	2,394 1,278 562 1,292 5,413		1,795 50 951 00 421 50 696 00 4,059 75	5	5			50 80 45 20 95	42 69 34 13 74	8 11 11 7 21
Perry	2, 150 775 2, 875 325 825	229 256 878 155 210	1,921 519 1,997 170 615	٠	1,440 75 389 25 1,497 75 127 50 461 25	5 5 25 5 5 55	5 5 12 5 55	13	325 00	20 100 150 25	18 64 117	2 36 33
PutnamRandolphRichlandRock IslandSaline	550 2,700 1,350 3,475 1,800	105 517 340 948 462.	445 2, 183 1, 010 2, 527 1, 338		333 75 1,637 25 757 50 1,895 25 1,003 50	5 5 20 5	5 5 11 5	9	225 00	15 65 80 55	14 50 78 40	1 15 2 15
Sangamon Schuyler Scott Shelby Stark	6,025 875 850 2,600 625	1,734 139 328 655 116	4, 291 736 522 1, 945 509		3, 217 75 552 00 391 50 1, 458 75 381 75	5 10 10	3 10 10	2	50 00	25 105 35 140	15 90 33 114	10 15 2 26
St. Clair Stephenson Tazewell Union Vermilion	7,750 2,350 2,225 1,550 4,300	1,249 494 469 246 1,352	6,501 1,856 1,756 1,304 2,948		4,875 75 1,392 00 1,317 00 978 00 2,211 00	100 5 25 	63 5 23	37	925 00	960 110 25 55	722 78 27 25	238 32 8 30
Warren	1,000 725 1,875 1,100 1,175	360 209 486 342 272	640 516 1,389 758 903		480 00 387 00 1,041 75 568 50 677 25	5 5 5	5 5 5			5 30 15 55 55	4 29 9 51 43	1 1 6 4 12
Whiteside Will Williamson Winnebago Woodford	2,425 3,425 4,125 2,700 1,350	762 727 1,301 208 459	1,663 2,698 2,824 2,492 891	•	1,246 75 2,023 50 2,096 75 1,869 00 668 25	10	10 8	2	50 00	95 90 50	84 80 44	11 10 6
Total	232,730	56,575	176, 155	\$	132, 100 50	690	568	122	\$3,050 00	8,445	6,360	2,085

FOR YEAR ENDING JUNE 30.

sold.		Hı	inting			Remitta	ince.	Fish.			
Value of license so	Deductions for express, etc.	Over payment.	Payment previous season's account.	Deductions over payment previous year.	Balance due.	Hunting.	Fishing.	Deductions, express, etc.	Over payment.	Balance due.	
\$ 15 00 285 00 385 00 20 97 40 25	\$2 94 1 29 2 98 1 41 2 58	\$ 2 25 6 25 19 50			\$107 25	\$2,115 06 841 21 1,013 77 238 59 730 92	\$ 15 00 285 00 355 00 97 40 25		• • • • • • • •	\$30 00 20 00	
35 00 160 00 26 00 45 00 20 00	3 81 3 67 82 3 83 2 52	8 95				1,602 64 1,514 33 367 43 557 92 926 23	35 00 159 90 26 00 45 00 20 00	\$10			
40 00 135 25 55 00 260 00 350 00	5 53 2 40 63 4 21 2 99	1 50 75 40 7 75			3 35	1,791 47 946 00 420 88 965 19 3,682 17	40 00 145 18 45 00 259 58 292 60	42	\$7 73	10 00	
5 25 118 25 180 00	2 74 42 6 66 1 11	8 73			25 50 17 25	1,438 01 363 33 1,824 82 127 50 442 89	5 25 107 75 174 67	25 33	75	11 00 5 00	
10 00 100 00 10 25 80 00	1 55 4 20 47 3 13 4 19	25 50 4 90 1 25	******		39 00 42 00	332 20 1,633 05 782 53 2,083 02 958 56	9 90 100 00 10 25 79 95	10			
26 75 155 50 20 00 130 00	4 54 56 2 25 2 42 3 00	3 56 5			57 34 101 25	3, 266 77 494 15 389 25 1, 355 08 378 75	26 75 155 60 19 90 94 90	15 10 10	25	35 00	
397 00 205 25 50 00 150 00	5 53 3 92 2 51 1 40 5 23	75 1 53 75 75		* * * * * * *	144 00 556 25 39 00	5,651 22 1,388 83 809 77 977 35 2,167 52	367 25 190 15 45 00 149 72	25 10 28	5 00	29 50 15 00 10 00	
5 00 5 00 25 25 20 00 65 00	1 30 1 39 2 39 5 45 11	50 			13 40	479 20 385 61 1,039 36 563 80 688 74	5 00 5 00 25 25 19 95 29 98	5 2		35 00	
170 00 26 25 30 00	3 87 5 22 6 07 1 76 2 83	30 50			47 25 216 75	1, 196 13 2, 018 28 1, 904 43 1, 917 24 665 42	170 00 21 00 29 93	7		5 25	
\$9,716 47	\$279 06	\$234 66		\$5 75	\$2,568 57	\$132,531 78	\$9,386 41	\$7 57	\$24 91	\$347 40	

APPROPRIATIONS AND EXPENDITURES FROM JULY 1, 1914, TO JULY 1, 1915.

Purpose.	Approp	ri-	Expendi-			
Purpose.	ations	s.	tures.		Balar	nce
Office and traveling expenses	\$51,529	96	\$51,427	47	\$ 102	49
Fish propagation and protection	22,704		22,662		42	64
Purchase of launches	4,518		4,518			
Maintenance of launches	1,489		1,445			61
Maintenance of game farm	12,442		12,441	63		03
Salaries of commissioners			· · · · · · · · · · · · · · · · · · ·		20,000	00
Salaries of wardens and deputy wardens	88,303		88,288			04
Salaries of extra deputy wardens		66	816	13	8	53
Salaries of clerks, stenographers and		0.0	F 004	0 =	4 20	
messenger	5,977	00	5,824	65	152	35
Total	207,790	46	\$187,424	77	\$20,365	69

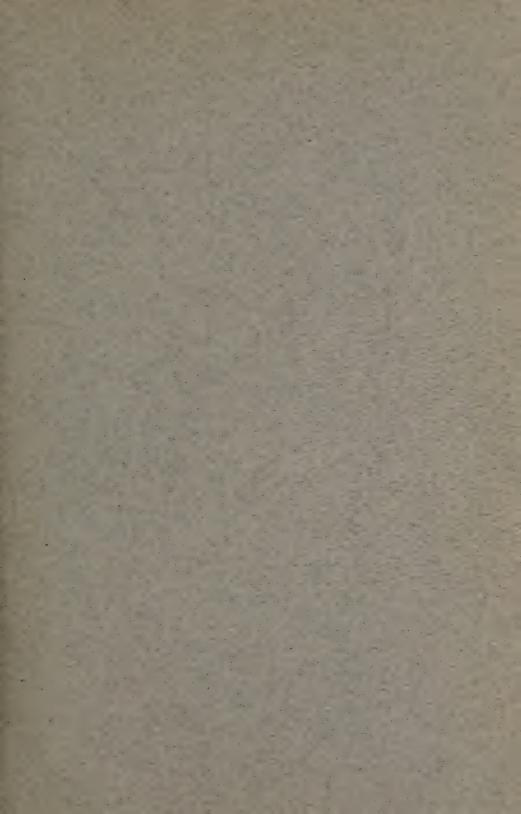
SUMMARY OF PROPERTY VALUES.

Personal property, Springfield\$ 4,070	65
Fisheries Bureau	
First District 4,372	65
Second District	
Third District 5,676	
Fourth District	O .A.
Fifth District	
Sixth District 520	00

Total value\$32,105 40

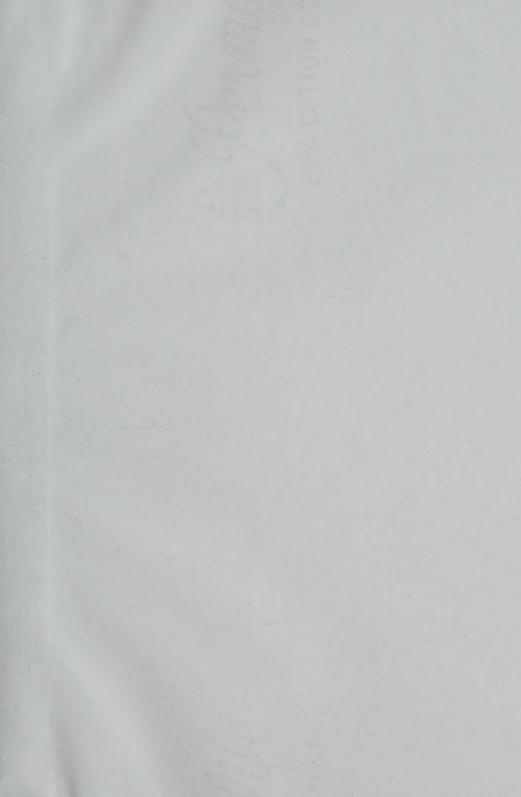






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